

# PATENT ABSTRACTS OF JAPAN

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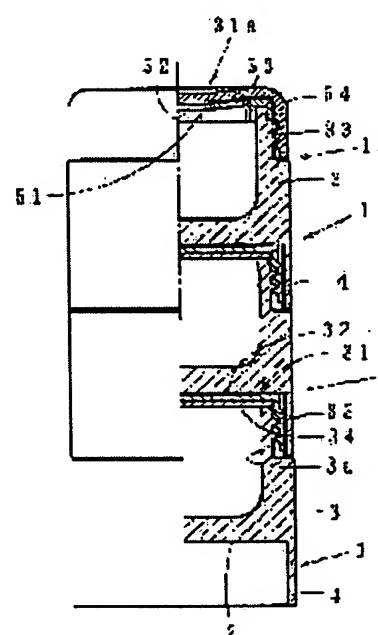
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## (54) JOINING CONTAINER

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a joining container for joining a plurality of containers respectively containing a plurality of articles used almost simultaneously, in which each container is made of a transparent and hard synthetic resin to enhance its quality but causes no coarse touch or friction upon joining or removing it from each other.

**SOLUTION:** The containers 1 are made of the transparent and hard synthetic resin and caps 31 are made of a non-hard synthetic resin. A plurality of the containers 1 fitted with the caps 31 on the tops are stacked to be joined in such a way that each cap is interposed between each container.



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CLAIMS

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[Claim(s)]

[Claim 1]

Two or more containers which consist of a non-hard cap made of synthetic resin which carried out fitting to the hard bottle object made of synthetic resin to this bottle object upper part are prepared, The cylinder 4 for connection was made to project to a lower part thru/or the upper part from a bottle object pars basilaris ossis occipitalis thru/or a cap top face, fitting of this cylinder for fitting was carried out to the cap outside surface of a low order container thru/or the lower outside surface of the high order container drum section 3, and two or more containers were made to connect in the vertical direction.

The connection container characterized by things.

[Claim 2]

The drum section 3 which set the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and from bottom wall 2 periphery, the cylinder 4 for connection is made to hang and it forms,

Moreover, fitting of the attachment and detachment of cap 31 is made free to the above-mentioned smallness outer-diameter section 3a outside surface, and it forms in it the peripheral wall 33 made to hang from top wall 32 periphery which blockades the upper bed effective area of the above-mentioned drum section,

Fitting of the attachment and detachment of the cylinder 4 for connection which hangs from a high order container was made free to cap peripheral wall 33 outside surface of a low order container.

The connection container according to claim 1 characterized by things.

[Claim 3]

The drum section 3 which set the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and it forms,

Cap 31 makes a peripheral wall 33 extend upwards, and is formed in the cylinder 4 for connection while it makes free fitting of the attachment and detachment of the peripheral wall 33 made to hang from top wall 32 periphery which blockades the upper bed effective area of the above-mentioned drum section to the above-mentioned smallness outer-diameter section outside surface,

To the lower outside surface of the high order container drum section 3, fitting of the attachment and detachment of the cylinder 4 for connection of a low order container was made free.

The connection container according to claim 1 characterized by things.

[Claim 4]

The drum section 3 which set the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and it forms,

Cap 71 makes the lid 74 which blockades the upper bed effective area of the above-mentioned drum section attach through a hinge 73 to some rings 72 made to attach to the above-mentioned smallness outer-diameter section 3a outside surface, and is formed in it,

The part except the periphery section of the above-mentioned bottle object bottom wall 2 is protruded below, the part except the periphery section of \*\*\*\* 9, and nothing and \*\*\*\* 74 is collapsed, and it is the cylinder 4 for connection, and nothing about the periphery section,

Fitting of the attachment and detachment of \*\*\*\* 9 of a high order container was made free into the cylinder for fitting of a low order container.

The connection container according to claim 1 characterized by things.

[Claim 5]

The drum section 3 which sets the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and it forms, Cap 71 makes the lid 74 which blockades the upper bed effective area of the above-mentioned drum section attach through a hinge 73 to some rings 72 made to attach to the above-mentioned smallness outer-diameter section 3a outside surface, and is formed in it,

While hanging the cylinder 4 for connection from the bottom wall 2 above-mentioned periphery, fitting of the attachment and detachment of the cylinder 4 for connection which hangs from a high order container was made free to the small outer-diameter section 76a outside surface of a low order container, having used the upper part of a lid 74 as small outer-diameter section 76a.

The connection container according to claim 1 characterized by things.

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Field of the Invention]

This invention relates to a connection container.

[0002]

[Description of the Prior Art]

[Problem(s) to be Solved by the Invention]

For example, although several sorts of cosmetics were used at the time of makeup, time might be taken in looking for the container containing cosmetics which each cosmetics are conventionally contained in the container according to individual, respectively, therefore is needed. It is troublesome especially in the case of a cellular phone.

[0003]

Such time and effort is solvable if it is the connection container which made several sorts of cosmetics used at the time of makeup contain independently.

[0004]

Moreover, although transparence and hard synthetic-resin material, such as PET, were known as what the feeling of purity according to receipt cosmetics and a high-class feeling are required, and fills such a demand, when the hard container made of synthetic resin was used as the above-mentioned connection container, two or more containers might be connected, and when dissociating, smoothness might be lacked, and the squeak might be made, the cosmetics container might be worn further, and the part might milk it.

[0005]

This invention aims at solving the above-mentioned fault produced when this connection container is made into transparence and the hard product made of synthetic resin, while considering as the above-mentioned connection container.

[0006]

[Means for Solving the Problem]

Two or more containers which consist of a non-hard cap made of synthetic resin which carried out fitting to the hard bottle object made of synthetic resin to this bottle object upper part as the 1st means are prepared,

The cylinder 4 for connection was made to project to a lower part thru/or the upper part from a bottle object pars basilaris ossis occipitalis thru/or a cap top face, fitting of this cylinder for fitting was carried out to the cap outside surface of a low order container thru/or the lower outside surface of the high order container drum section 3, and two or more containers were made to connect in the vertical direction.

[0007]

As the 2nd means, while having the 1st means of the above, the drum section 3 which set the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and from bottom wall 2 periphery, the cylinder 4 for connection is made to hang and it forms,

Moreover, fitting of the attachment and detachment of cap 31 is made free to the above-mentioned smallness outer-diameter section 3a outside surface, and it forms in it the peripheral wall 33 made to

hang from top wall 32 periphery which blockades the upper bed effective area of the above-mentioned drum section,

Fitting of the attachment and detachment of the cylinder 4 for connection which hangs from a high order container was made free to cap peripheral wall 33 outside surface of a low order container.

[0008]

As the 3rd means, while having the 1st means of the above, the drum section 3 which set the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and it forms,

Cap 31 makes a peripheral wall 33 extend upwards, and is formed in the cylinder 4 for connection while it makes free fitting of the attachment and detachment of the peripheral wall 33 made to hang from top wall 32 periphery which blockades the upper bed effective area of the above-mentioned drum section to the above-mentioned smallness outer-diameter section outside surface,

The connection container according to claim 1 characterized by making free fitting of the attachment and detachment of the cylinder 4 for connection of a low order container to the lower outside surface of the high order container drum section 3.

[0009]

As the 4th means, while having the 1st means of the above, the drum section 3 which set the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and it forms,

Cap 71 makes the lid 74 which blockades the upper bed effective area of the above-mentioned drum section attach through a hinge 73 to some rings 72 made to attach to the above-mentioned smallness outer-diameter section 3a outside surface, and is formed in it,

The part except the periphery section of the above-mentioned bottle object bottom wall 2 is protruded below, the part except the periphery section of \*\*\*\* 9, and nothing and \*\*\*\* 74 is collapsed, and it is the cylinder 4 for connection, and nothing about the periphery section,

Fitting of the attachment and detachment of \*\*\*\* 9 of a high order container was made free into the cylinder for fitting of a low order container.

[0010]

As the 5th means, while having the 1st means of the above, the drum section 3 which sets the upper part to small outer-diameter section 3a for the above-mentioned bottle object 1 from bottom wall 2 periphery is made to stand up, and it forms,

Cap 71 makes the lid 74 which blockades the upper bed effective area of the above-mentioned drum section attach through a hinge 73 to some rings 72 made to attach to the above-mentioned smallness outer-diameter section 3a outside surface, and is formed in it,

While hanging the cylinder 4 for connection from the bottom wall 2 above-mentioned periphery, fitting of the attachment and detachment of the cylinder 4 for connection which hangs from a high order container was made free to the small outer-diameter section 76a outside surface of a low order container, having used the upper part of a lid 74 as small outer-diameter section 76a.

[0011]

[Embodiment of the Invention]

A drawing is explained below. If the 1st operation gestalt which drawing 1 shows first is explained, 1 is the bottle object made of synthetic resin fabricated by transparence, hard PET, etc., will stand up the drum section 3 which set the upper part to small outer-diameter section 3a from bottom wall 2 periphery, and will hang the cylinder 4 for connection from bottom wall 2 periphery. Small outer-diameter section 3a is taken as the male screw cylinder. In addition, the cylinder for connection may be excluded from the lowest bottle object.

[0012]

31 is the cap which has the top wall 32 which blockades the upper bed effective area of the above-mentioned drum section, is made to screw from this top wall periphery to the above-mentioned smallness outer-diameter section outside surface, and hangs a peripheral wall 33, and is good to carry out fitting of the packing 34 to the upper bed section inner surface of a peripheral wall 33 like a graphic display. Let caps be non-hard products made of synthetic resin, such as P.P.

[0013]

The outer diameter of the cap peripheral wall 33 is prepared almost equally to the bore of the

cylinder 4 for previous statement connection, and presupposes that it is possible to carry out fitting of each container upper part which carried out fitting of the cap 31 to the bottle object upper part like a graphic display, and to extract it into the cylinder 4 for connection which other bottle objects have. The outer diameter of the cylinder 4 for connection is prepared almost equally to the outer diameter of a drum section 3.

[0014]

Different cap 31a from the above may be made to screw in the top bottle object 1a made to connect in the vertical direction as shown in drawing. This cap has prepared peripheral wall 33 outer diameter almost equally to the outer diameter of the bottle object drum section 23, and a \*\*\*\* cap does not have packing, but it is the flange-like plate 51 which has a bore 52 for the upper bed effective area of the bottle object drum section 3 in the center section, while it was made to hang from the periphery section of this flange-like plate, it carries out fitting of the fitting cylinders 53 and 54 of the Sotoji pile to a drum section up edge inside-and-outside side, and it is using this bottle object 1 as the powder stowage container. The upper bed section of a \*\*\*\* bottle object drum section is provided so that it may consider as a small outer diameter further, method fitting cylinder of outside 54 outer diameter may be prepared almost equally to a male screw bottom of thread circle outer diameter and it may not become obstructive [ cap attachment and detachment ] from a male screw attachment part.

[0015]

Drawing 2 shows the 2nd operation gestalt. The bottle object 1 of this operation gestalt stands up a drum section 3 from bottom wall 2 periphery, and is using small outer-diameter section 3a of this drum section upper part as the male screw cylinder. In the example of a graphic display, the lower part and the upper part of a drum section 3 are made into a small outer diameter, and pars intermedia is made into the large outer-diameter section.

[0016]

Cap 31 makes a peripheral wall 33 extend upwards, and forms the cylinder 4 for connection while it makes a peripheral wall 33 hang from top wall 32 periphery which blockades the upper bed effective area of a drum section 3 and making it screw in the above-mentioned smallness outer-diameter section 3a. Fitting of this cylinder 4 for connection is carried out to the small outer-diameter section outside surface of drum section 3 lower part, and it forms two or more containers in the vertical direction possible [ connection ].

[0017]

About the top container, it mentions later.

[0018]

What is necessary is just to prepare this member in it as occasion demands, although fitting of the short cylinder 62 which stands up from the bottom plate periphery of \*\*\*\* 61 is carried out to the lowest bottle object bottom outside side.

[0019]

Drawing 3 shows the 3rd operation gestalt. The bottle object 1 of this operation gestalt makes a bottom wall 2 and a drum section 3 continue in the shape of the spherical surface, and it forms and it hangs the brief foot cylinder 5 from a bottom outside periphery. Moreover, the upper part of a drum section is used as the male screw cylinder as small outer-diameter section 3a. Moreover, the concave 6 is attached around the lower outside surface of a drum section.

[0020]

Cap 31 makes a peripheral wall 33 hang from top wall 32 periphery which blockades a drum section upper bed effective area, and carries out fitting to the above-mentioned male screw cylinder. The peripheral wall 33 outside surface It considers as the configuration which made the spherical surface which the bottom wall and drum section outside surface of the above-mentioned bottle object form extend to the method of the inside of a top, and from the peripheral wall upper part, the cylinder 4 for connection is stood up to the method of the outside of a top, and the engagement protruding line 35 which carries out fitting to the above-mentioned concave 6 is attached around the upper bed inner surface. Moreover, set a small gap between the cylinder 4 for connection, and the pinching cylinder 36 is made to stand up from top wall 32 top face to it. This pinching cylinder outside surface is carried out to previous statement foot cylinder 5 inner surface, fitting of the lower inner surface of

the cylinder 4 for connection is carried out to foot cylinder 5 outside surface again, respectively, fitting of the up inner surface of the cylinder for connection to the bottom outside surface of the upper drum section 3 is enabled rather than a foot cylinder 5, and fitting of the attachment and detachment of the engagement protruding line 7 of it is made free into the concave 6 attached to the upper bed outside surface of the fitting part.

[0021]

About the top container, it mentions later.

[0022]

Drawing 4 and drawing 5 show the 4th operation gestalt. The bottle object 1 of this operation gestalt has hung \*\*\*\* 9 of a small outer diameter rather than the drum section 3 from bottom wall 2 underside. Moreover, the upper bed section of a drum section is set to small outer-diameter section 3a.

[0023]

The cap 71 is formed with the ring 72 made to attach to the upper bed section outside surface of the bottle object drum section 3, and the lid 74 attached to this ring part through the hinge 73.

[0024]

As for a hinge 73, it is [ that what is necessary is just to make extract impossible attach a ring 72 closely to the upper bed section outside surface of a drum section ] desirable to consider as the well-known hinge which has the auxiliary hinges 73b and 73b on right-and-left both sides of main hinge 73a and in which elastic reversal is possible, as drawing 5 shows.

[0025]

A lid 74 hangs a peripheral wall 76 from superior lamella 75 periphery, and collapses the top-face part except the superior lamella periphery section below, and is using the periphery section as the cylinder 4 for connection, and is making packing 77 attach in the roof back side. In addition, 78 is the fingerplate section for opening.

[0026]

Into the above-mentioned cylinder 4 for connection, fitting of the \*\*\*\* 9 outside surface made to hang from the underside of a bottle object bottom wall is carried out, and connection of two or more containers should just perform it.

[0027]

About the top container [ example / this ], it mentions later.

[0028]

Drawing 6 shows the 5th operation gestalt. If it is in this operation gestalt, while carrying out the gryposis of the periphery section of the bottle object bottom wall 2 to the method of the outside of a top and forming it in it The cylinder 4 for connection which has a concave from the bottom wall periphery section in a lower inner surface to a lower part rather than a bottom wall underside is hung. Moreover, set the upper bed section of a drum section 3 to small outer-diameter section 3a, and this small outer-diameter section considers as the inside-and-outside double cylinder which has the upward step 12. A container liner 13 makes a drum section internal surface extend upwards, and form it, and an outer case 14 sets a small gap between container liners, and is made to stand up lower than a container liner. Among inside-and-outside cylinders, such as it half the bottom -- the large outer-diameter section -- and while making the auxiliary rings 15, such as an elastomer which makes Johan the small outer-diameter section, attach and making the auxiliary ring inner surface attach to container liner 13 outside surface, a large outer-diameter section top face is made almost equal to outer case 14 top face, and the engagement protruding line is attached to the auxiliary ring upper bed outside surface.

[0029]

Although cap 71 is formed almost like the case of drawing 4 The crevice of superior lamella 75 top face of a lid carries out the gryposis of the periphery section for the whole to the shape of a top face of \*\*\*\*. Moreover, set the peripheral wall 76 upper part to small outer-diameter section 76a through the upward step, and the short cylinder was made to hang from the inner surface of the small outer-diameter section, and it has prepared so that the engagement protruding line of the auxiliary ring 15 above-mentioned upper bed may be engaged to the short cylinder inner surface at the time of lid lock out.

[0030]

Fitting of the connection of a container is carried out to the small outer-diameter section outside surface in which the upper part of the lid peripheral wall of a low order container forms the cylinder 4 for previous statement connection, and it is performed by carrying out fitting of the bottom wall 2 into the crevice of lid superior lamella 75 top face. In addition, the protruding line attached around the smallness outer-diameter section 76a outside surface at this time fits in into the concave attached around cylinder 4 inner surface for connection.

[0031]

Also in this operation gestalt, the upper part of the top container is considered as another configuration.

[0032]

What is necessary is just to form the structure of the bottle object 1a upper part of the top container in the 2nd and 3rd operation gestalt, and cap 31a like the top bottle object upper part of drawing 1 , and a cap. The lower part of bottle object 1a presupposes that it is the same as that of the lower part of the 2nd and 3rd operation gestalt bottle object.

[0033]

The top container is used as the powder stowage container also in each operation gestalt which drawing 4 and drawing 6 show, therefore, in the case of drawing 1 , the upper bed effective area of a top bottle object 1a drum section is blockaded like with the flange-like plate 51 with fitting cylinder 53 which has a bore 52 in the center section.

[0034]

Although the caps 71a and 71a of the top container are made almost to be the same as that of the cap of the low order container of drawing 4 and drawing 6 each operation gestalt, both lid 74 top faces are leveled, and, in the case of drawing 6 , the peripheral wall 76 upper part is made equal to a lower outer diameter.

[0035]

In previous statement each operation gestalt, all bottle objects are made into transparence and the hard product made of synthetic resin, and make a cap the non-hard product made of synthetic resin.

[0036]

In a \*\*\*\* operation gestalt, although structure of each cap of the top container was made into different structure from the cap of a low order container, it is the same structure and does not interfere.

[0037]

[Effect of the Invention]

This invention is what two or more containers which made two or more cosmetics which can be made to connect two or more containers in one, therefore are needed for example, at the time of makeup contain according to an individual are used as the connection container of a lot for since it considered as the previous statement configuration. There is no disadvantage of looking for the container of cosmetics receipt to need, and when it seems that he wants to carry only specific cosmetics stowage containers, such as the time of going out, it can remove from other containers and only a specific container can also be carried. since all \*\*\*\* bottle objects were made into hard and transparence, they can use as a container with feeling of purity and a high-class feeling, and all caps are made into the non-hard product made of synthetic resin, since they were prepared so that a bottle object might be connected through this cap, they have neither the feeling of friction lacking in the smoothness in the case of connecting both hard synthetic-resin products, and dissociating, nor a squeak, and they grind further -- a part becomes white and does not spoil the implement outside a container

[0038]

Form like claims 3 and 4 with the lid which connected the cap with the ring and this ring through the hinge, the ring is made to attach to the upper bed section outside surface of a bottle object drum section, and it is not troubled by enabling it to open and close the upper bed effective area of a drum section by boom hoisting of the lid centering on a hinge on the occasion of receipt object drawing in a bottle object on the place of a cap.

[Brief Description of the Drawings]

[Drawing 1] It is half section drawing of this invention container shown with the 1st operation gestalt.

[Drawing 2] It is half section drawing shown with the 2nd operation gestalt.

[Drawing 3] It is half section drawing shown with the 3rd operation gestalt.

[Drawing 4] It is the sectional view shown with the 4th operation gestalt.

[Drawing 5] It is the top view of the drawing 4 container.

[Drawing 6] It is the sectional view shown with the 5th operation gestalt.

[Description of Notations]

1 -- Bottle object 4 -- Cylinder for connection

31 -- Cap 51 -- Flange-like plate

71 -- Cap

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[Translation done.]

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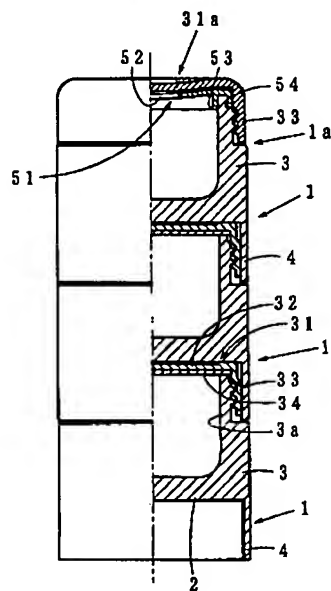
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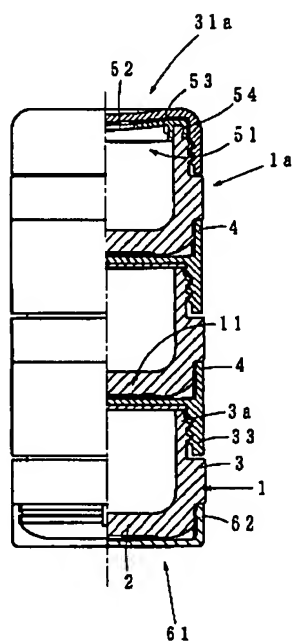
DRAWINGS

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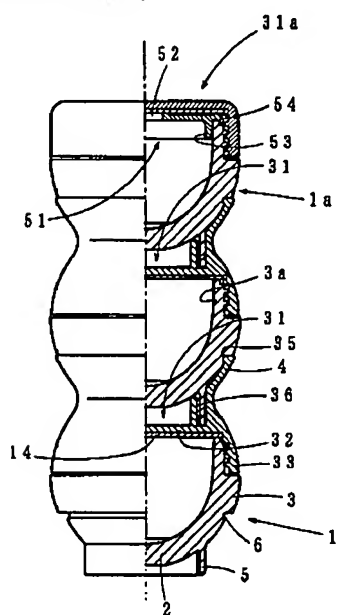
[Drawing 1]



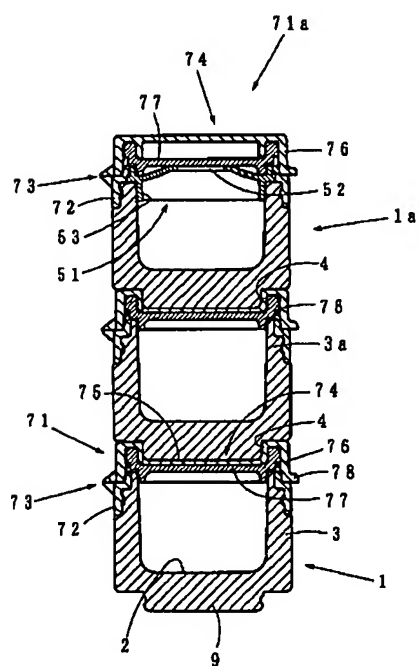
[Drawing 2]



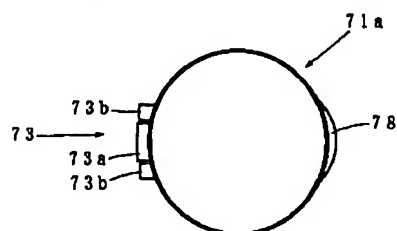
[Drawing 3]



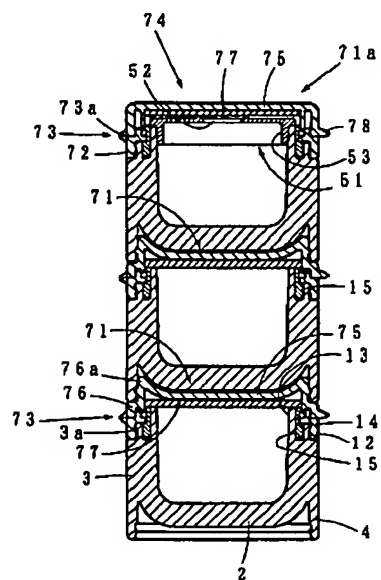
[Drawing 4]



[Drawing 5]



[Drawing 6]



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[Translation done.]